Indications for Hip Arthroscopy

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Introduction

- Surgical treatment of symptomatic hip disease has changed over the last decade
 - Arthroscopy
 - Osteotomy (PAO)
 - Surgical hip dislocation



Goals

Review Established Indications for hip arthroscopy

Discuss evolving indications for hip arthroscopy

Review contra-indications for hip arthroscopy



Development of Arthroscopic Techniques

- Improved instrumentation
- Co-adaptation of shoulder techniques
- Clear evolution of hip specific techniques
 - T capsulotomy
 - Labral fixation
 - Flexible/angled instrumentation



Explosive Growth of Hip Arthroscopy

<u>J Arthroplasty.</u> 2016 Sep 28. pii: S0883-5403(16)30644-1. doi: 10.1016/j.arth.2016.09.004. [Epub ahead of print]

Trends in Utilization and Outcomes of Hip Arthroscopy in the United States Between 2005 and 2013.

Maradit Kremers H¹, Schilz SR², Van Houten HK³, Herrin J⁴, Koenig KM⁵, Bozic KJ⁵, Berry DJ⁶.

- $3.6 \rightarrow 16.7 \text{ per } 100,000$
- 460% increase in utilization
- Expanding Recognition of pathology
- Mainstream education of residents
- Fellowship programs dedicated



Hip Arthroscopy

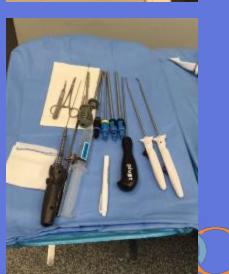
- Setup
 - Supine or Lateral decubitus position
 - Requires Traction
 - 50lbs, 10mm
 - Goal <90min







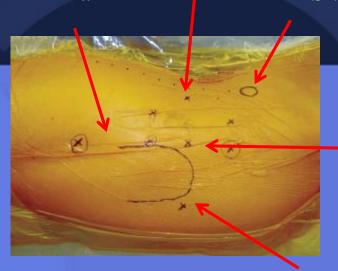




Hip Arthroscopy Mid-anterior Portal

ASIS

- Approach/Technique
 - 2 or 3 portals
 - 3rd- Distal anterior lateral (DALa) improved placement of anchors
 - Do not go past midline to avoid injury to LFCN



Anterolateral Peritroch

Posterolateral peritroch





Established Indications

- FAI
- Labral tears
- Loose bodies
- PVNS, synovial based pathologies
- Ligamentum tears



Labral Repair









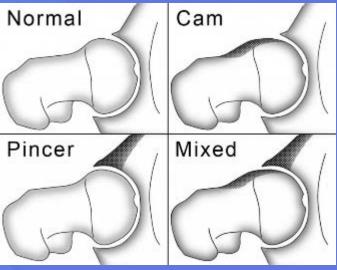


Femoroacetabular Impingement

 Process by which a misshapen hip joint secondarily leads to breakdown of the intra-articular structures causing pain and dysfunction









FAI – Structural Impingement

- Acetabular rim impingement
- Associated labral lesions
- Femoral impingement





28 yo CAM/FAI









Isolated Intra-articular Abnormalities

- Labral tears traumatic
- Ligamentum tear
- Loose bodies
 - Synovial osteochondromatosis
 - trauma
- Synovitis



Isolated Peri-articular Abnormalities

- Excision of Os Acetabuli
 - Associatedlabral tear/repair





Extra-articular Femoro-Pelvic Impingement



Subspine Impingement



Trochanteric Pelvic Impingement



Ischiofemoral Impingement



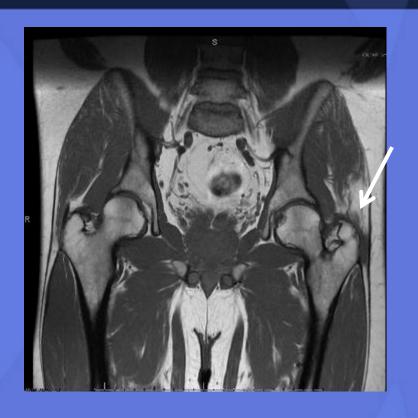
Evolving Indications

- Psoas impingement
- Peri-articular soft tissue procedures
 - IT band release
 - Abductior repair
- Ischiofemoral impingement



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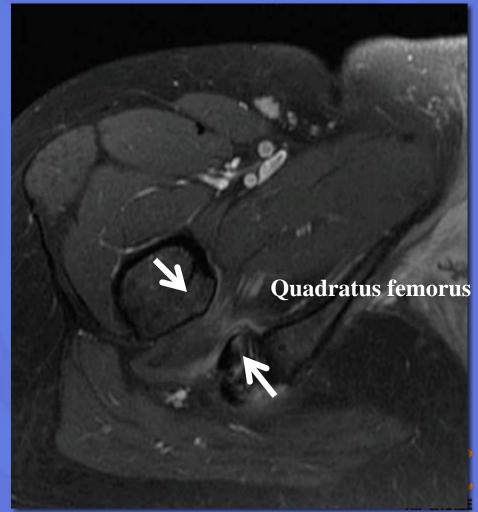




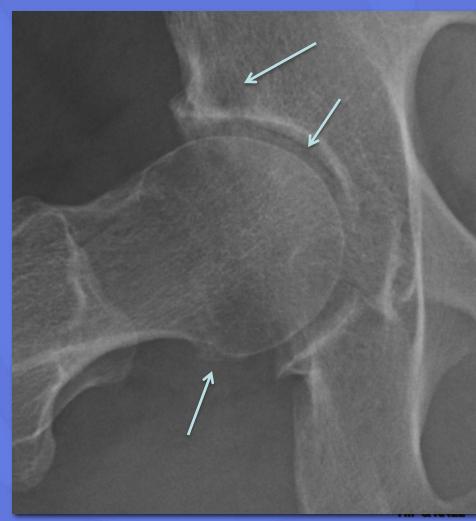
37 yo with painful grinding sensation/sound with walking

Ischiofemoral impingement





- Advanced intraarticular disease
 - Acetabular cyst formation
 - Vacuum sign
 - Posterior/inferior osteophyte formation



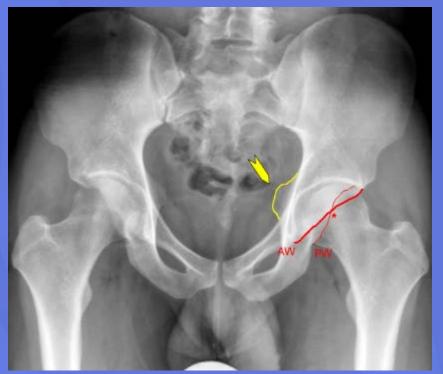
- FAI with Tonnis 2 or higher
 - Severity of lesions dependent on
 - Degree of structural conflict
 - Duration symptoms



- Complex/extensive pathomorphology
 - Posteriolateral extension of CAM
 - Global rim trim
 - Pediatric disease sequelae
 - SCFE
 - Perthes



- Severe Acetabular retroversion
 - Antero-superior over coverage
 - Posterior wall sign
 - Ischial spine sign





- Posterior femoral neck pathology
- CAM lesion that extends posterior to retinacular vessels

Osteochondroma on femoral neck





- Inaccessible hip
 - Obesity
 - Heterotopic ossification
 - Severe scaring





Dysplasia





Conclusions

- Excellent clinical outcomes can be expected with established indications
 - FAI
 - Isolated intra-articular hip abnormalities
- Can be effective adjunct to open procedures
- Major contra-indications are established
 OA and major structural deformities
- Future study is needed to delineate evolving indications



Thank You



